

Xerox Docket No. D/A1129
Application No. 09/765,433

REMARKS

Claims 1-20 are pending. By this Amendment, claims 7 and 14 are amended.

Entry of the amendments is proper under 37 CFR §1.116 because the amendments:

(a) place the application in condition for allowance, for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration, because the amendments amplify issues previously discussed throughout prosecution; and (c) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection, particularly the Examiner's new argument with respect to "comprising." Thus, Applicant respectfully requests entry of the amendments.

Applicant appreciates the courtesies shown to Applicant's representative by Examiner Dang in the August 14 personal interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

The Office Action makes final the Restriction Requirement set forth in the March 13, 2003 Office Action (paper No. 3). The Restriction Requirement is respectfully traversed.

The Patent Office has not met its burden under MPEP § 806.05(f), in that the Patent Office has failed to show that inventions I and II are distinct. Particularly, the Patent Office has failed to show that the alternative method for fabricating a micromachined device proposed by the March 13, 2003 Restriction Requirement is distinct from the method claimed in claim 7 or 14. On the contrary, the alternative method proposed by the March 13, 2003 Restriction Requirement is clearly anticipated by the methods recited in claims 7 and 14.

The March 13, 2003 Restriction Requirement alleges that the micromachined device of claims 1-6 could be made by forming an insulation layer on the substrate, etching an opening in the insulation layer to expose the surface of the substrate, and bonding the silicon

Xerox Docket No. D/A1129
Application No. 09/765,433

structure to the resulting substrate, thereby creating a gap that at least partially thermally isolates the silicon structure from the substrate. However, the alleged step of forming an insulation layer on the substrate is anticipated by the "forming an insulation layer over at least part of the substrate," as recited in claims 7 and 14. The alleged step of etching an opening in the insulation layer to expose the surface of the substrate is anticipated by "forming a gap in the insulation layer," as recited in claims 7 and 14. Finally, the alleged step of bonding the silicon structure to the resulting substrate is anticipated by "forming a silicon layer over at least part of the insulation layer," as recited in claims 7 and 14. It should be noted that the common dictionary definition of "forming" is very broad and encompasses, for example, "making," "producing," "shaping," "molding," "organizing," "arranging," "fashioning," "developing," and "composing."¹ Therefore, the proposed process of the March 13 Restriction Requirement is not materially different than the process for making a micromachined device of claims 7-20.

As the Examiner has failed to suggest a process materially different than that of claims 7-20 for making the micromachined device of claims 1-6, the Restriction Requirement must be withdrawn (MPEP 806.05(f)).²

The Office Action rejects claims 7-10, 12-17 and 19-20 under 37 U.S.C. §102(b) over U.S. Patent 5,510,276 to Diem et al. (hereinafter "Diem"). The rejection is respectfully traversed.

By this Amendment, claims 7 and 14 are amended to recite that the gap in the resulting micromachined device remains at least partially open. Such language properly

¹ The American Heritage College Dictionary, 3rd Ed. 535.

² "If applicant convincingly traverses the requirement, the burden shifts to the examiner to document a viable alternative process or product, or withdraw the requirement."

Xerox Docket No. D/A1129
Application No. 09/765,433

excludes the step of sealing gap 16A with insulator 24A in Diem, as the resulting device in Diem does not have a gap that remains at least partially open. Furthermore, the Patent Office may not read a step of subsequently sealing the gap relying solely on the "comprising" transitional phrase of claims 7 and 14, because such a step would directly conflict with the stated feature that the gap in the resulting micromachined device remains at least partially open. Therefore, for at least the reasons stated, Diem does not disclose all the features of claims 7-10, 12-17, and 19-20 under 35 U.S.C. §102(b). As a result, Applicant respectfully requests that the rejection be withdrawn.

Still further, as described in detail in Applicant's May 9, 2003 Amendment, Diem teaches away from an at least partially open gap because were the gap (vacuum spaces 16, 18) to remain partially open, the device of Diem would be inoperable. Because Diem must be read as a whole, including the portions that teach away (MPEP §2141.02), and the device of Diem would be unsuitable for the intending purpose if the gap were to remain at least partially open (MPEP §2143.01), the Office Action's reasoning provides no basis for a 35 U.S.C. §103(a) rejection over Diem for any of claims 1-20.

Finally, the Office Action rejects claims 11 and 18 under 35 U.S.C. §103(a) over the previous rejection of claims 7-10, 12-17 and 19-20 under 35 U.S.C. §102(b). The rejection is respectfully traversed.

The rejection is premised upon the assumption that Diem discloses all the features of claims 7-10, 12-17, and 19-20 under 35 U.S.C. §102(b). Because, as described above, Diem does not disclose each of the features of claims 7-10, 12-17, and 19-20, the rejection is moot. Therefore, Applicant respectfully request that the rejection be withdrawn.

It should be noted that the amendments to claims 7 and 14 do not raise new issues or add new matter. The previous feature of claims 7 and 14, "forming a gap in the insulation

Xerox Docket No. D/A1129
Application No. 09/765,433

layer that remains at least partially open," necessarily encompasses the current feature of claims 7 and 14 that "the gap in the resulting micromachined device remain at least partially open." Applicant has only removed the possibility that the gap may be subsequently closed. Most important, however, is that a thorough search of the art for a device in which the gap remained at least partially open encompasses both a situation in which the gap is subsequently closed and the situation in which the gap remains open in the resulting device. Therefore, because the Patent Office has already performed a search of the art encompassing the present features of claims 7 and 14, no further search is necessary. As a result, in accordance with 35 U.S.C. §1.116, entry of the Amendment After Final would require only a cursory review by the Examiner (MPEP §714.13).

Furthermore, at the very least, Applicant submits that the present amendments place the application in a better form for appeal. The amendments to claims 7 and 14 focus the disputed issue on whether Diem describes a micromachined device with a gap that remains at least partially open. It is clear from Applicant's previous remarks contained in the May 9, 2003 Amendment that this is the feature Applicant has been asserting and the issue that Applicant has been arguing from the beginning of prosecution.

Finally, "(t)he examiner should never lose sight of the fact that in every case the applicant is entitled to a full and fair hearing, and that a clear issue between applicant and examiner should be developed, if possible, before appeal" (MPEP §706.07). "The applicant who is seeking to define his or her invention in claims that will give him or her the patent protection to which he or she is justly entitled should receive the cooperation of the examiner to that end, and not be prematurely cut off in the prosecution of his or her application" (MPEP §706.07).

Xerox Docket No. D/A1129
Application No. 09/765,433

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-20 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

Jesse O. Collier
Registration No. 53,839

JAO:JOC/tea

Date: August 18, 2003

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 24-0037</p>
